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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|--------------------|
| 10/617,818 | 07/14/2003 | Toshiaki Taguchi | Q76550 | 5231 |
| 11379 | 750 | 06/04/2004 | | EXAMINER |
| SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | | RAISON, VERONICA F |
| | | | ALT UNIT | PAPER NUMBER |
| | | | 1755 | |

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|---|----------------------------------|
| Office Action Summary | Application No. 10/617,818 | Applicant(s) TAGUCHI, TOSHIKI |
| | Examiner Veronica F. Faison | Art Unit 1755 |
| Period for Reply | — The MAILING DATE of this communication appears on the cover sheet with the correspondence address — | |

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A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- Responsive to communication(s) filed on _____.
- This action is FINAL. 2b) This action is non-final.
- Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - All
 - Some *
 - None of:
 1. Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No. _____.
 - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- Notice of References Cited (PTO-892)
- Notice of Draftsperson's Patent Drawing Review (PTO-848)
- Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12-8-03
- Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- Notice of Informal Patent Application (PTO-152)
- Other: _____.

DETAILED ACTION***Specification***

The disclosure is objected to because of the following informalities:

On page 4, wherein R₁₀₂ to R₁₀₆ and R₁₀₉ are defined in the second line of the paragraph the term "alkynyl group" is repeated. The Examiner suggests deleting the second occurrence of the term.

On page 4-5, wherein Y₁ to Y₃ are defined in the third line of the paragraph the term "aryl group" is repeated. The Examiner suggests deleting the second occurrence of the term.

Appropriate correction is required.

Claim Objections

Claims 3 and 6 are objected to because of the following informalities:

In claim 3, wherein R₁₀₂ to R₁₀₆ and R₁₀₉ are defined in the second line of the paragraph the term "alkynyl group" is repeated. The Examiner suggests deleting the second occurrence of the term.

In claim 3, wherein Y₁ to Y₃ are defined in the third line of the paragraph the term "aryl group" is repeated. The Examiner suggests deleting the second occurrence of the term.

In claim 6, line 2, Applicant uses the word "type" appended to an otherwise definite phrase (i.e. aqueous solution-type). It is the Examiner's opinion that the word "type" does not further definite the term. The Examiner suggest deleting the word "type".

Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3, 6 and 8 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5 and 7 of copending Application No. 10/119,897 (US Publication 2003/0097959). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said published claims and would be obvious thereby, for example in US 2003/0097959 which claims a dye, an aqueous medium and formula (1) corresponds to the dye, water and water-miscible organic solvent and a precursor of acid and formula (10) claimed in the present application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3, 6 and 8 directed to the same invention as that of claims 1, 5 and 7 of commonly assigned 10/119,897 (US Publication 2003/0097959). The issue of priority

Art Unit: 1755

under 35 U.S.C. 102(g) and possibly 35 U.S.C. 102(f) of this single invention must be resolved.

Since the U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302), the assignee is required to state which entity is the prior inventor of the conflicting subject matter. A terminal disclaimer has no effect in this situation since the basis for refusing more than one patent is priority of invention under 35 U.S.C. 102(f) or (g) and not an extension of monopoly.

Failure to comply with this requirement will result in a holding of abandonment of this application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

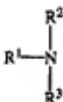
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Yano et al (US Patent 6,015,455).

Yano et al teaches an ink jet recording ink comprising water, water-soluble organic solvent, at least one dye (water-soluble dye) having at least one carboxyl group in the form of a free acid, a substituted aromatic compound and at least one alkali metal hydroxide (abstract and col. 2 lines 58-63). The reference also teaches an ink jet

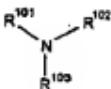
recording method in which such ink droplets are discharged from an orifice according to a recording signal to record an image (abstract and col. 2 lines 49-53, col. 44 lines 38-51). The ink composition may further comprise an amine compound of the general formula, which is the same as formula (10) set forth in claim 3 as a precursor of acid:



one or two of R¹, R² and R³ is an alkyl group having 1 to 5 carbon atoms, and the remainder is a group selected from a hydrogen atom, an alkyl group having 1 to 5 atoms, and a substituted alkyl group having 1 to 5 carbon atoms in the alkyl chain and substituted by a hydroxyl group or carbamoyl group. Two of R¹, R² and R³ may be the same substituent (col. 41 lines 42-62). The amine compound may be used alone or in combination and present in the amount of 0.1 to 8 percent by weight (col. 42 lines 61-65). Applicant discloses on page 7-25 of the specification, that the precursor of acids compounds showing no acidity at the time of preparation or storage but capable of rendering the ink system acidic as a result of the reaction are the compounds represented by formulas (1)-(10). The ink composition may also comprise a surfactant to further stabilize the condition of the dye solution (col. 43 lines 52-53). See claims 1, 4, 5, 14 and 15. The composition as taught by Yano et al appears to anticipate the claimed invention.

Claims 1-8 are rejected under 35 U.S.C. 102(a) as being anticipated by Omatsu et al (US Publication 2003/0097959).

Omatsu et al teaches an ink composition comprising an azo dye having an aromatic nitrogen-containing 6-membered heterocycle, a compound represented by formula (I):



wherein R101 and R102 each independent represents a hydrogen atom, an aliphatic group, a heterocyclic group, and an acyl group; R103 represents an aromatic oxy group, aliphatic thio group, an aromatic thio group, an acyloxy group and a substituted or unsubstituted amino group or hydroxy group and an aqueous medium wherein the azo dye is dissolved or dispersed in the aqueous medium (abstract, page 1 para. 0012-0014 and page 22 para. 0115+). The compound of formula (I) is present in the amount of 2 to 200 parts by mass based on 100 parts by mass of the dye (page 27 para. 0127). The reference further teaches that various additives such as surface tension regulators (i.e. surfactants) can be used in the composition (page 30 para. 0160- page 31 para. 0171). The examples teach an ink set using the ink composition described above. The reference further teaches the use of an ink jet printing method, which ejects the ink composition by a known recording process (page 32 para. 0193). Applicant discloses on page 7-25 of the specification, that the precursor of acids compounds showing no acidity at the time of preparation or storage but capable of rendering the ink system acidic as a result of the reaction are the compounds represented by formulas (1)-(10). The composition as taught by Omatsu et al appears to anticipate the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 911 374.

EP 0 911 374 teaches an ink set comprising at least a black ink, a yellow ink, a magenta ink and a cyan ink wherein each ink comprises at least a colorant, a water-soluble cationic polymer and water (abstract and page 3 lines 21-26). The colorant present in the ink composition are organic color materials soluble in water (page 3 line 55). The ink composition may further comprise a dissolution accelerator (precursor of acid) such as water-soluble azine compounds including pyrazine and triazine, which broad enough to encompass the formula (7) set forth in claim 3 (page 5 lines 4-28 and page 6 lines 9-15). It is the position of the Examiner that similar compositions with similar components would obviously perform in the same manner (i.e. precursor of acid showing no acidity) absence evidence to the contrary. EP 0 911 374 fails to specifically exemplify the use of precursor of acid (dissolution accelerator) as claimed by applicant. Therefore, it would have been obvious to one of ordinary skill in the art to use the dissolution accelerator (precursor of acid) as claimed by applicant as EP 0 911 374 also discloses the use of dissolution accelerator (precursor of acid) but shows no example incorporating them.

Conclusion

The remaining references listed on forms 892 and 1449 have been reviewed by the Examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 571-272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Veronica F. Faison